

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

R00019AT
Revision 2
Delta Enterprise
UH-60A
EH-60A

October 1, 2019

TYPE CERTIFICATE DATA SHEET R00019AT

This data sheet, which is a part of Type Certificate (TC) No. R00019AT, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the 14 Code of Federal Aviation Regulations (14 CFR).

TYPE CERTIFICATE (TC) Delta Enterprise
HOLDER: 209 South Jefferson Street
 Winchester, Tennessee 37398

I. MODEL UH-60A – (Restricted Category Rotorcraft) Approved September 23, 2016.

ENGINES: (2) General Electric T700-GE-700 Original
 (2) General Electric T700-GE-701C Alternate
 (2) General Electric T700-GE-701D/CC Alternate

FUEL: Aviation Kerosene JP-4, JP-5, JP-8, Jet A, Jet A-1 or Jet B.

ENGINE LIMITS: (T700-GE-700)

	SHAFT HP	POWER TURBINE RPM	GAS GEN RPM	POWER TURBINE INLET (TGT)
Military Power (30 min.)	1,561	20,900	44,700	850° C
Normal Cont. Cruise	1,318	20,900	44,700	775° C

ENGINE LIMITS: (T700-GE-701C)

	SHAFT HP	POWER TURBINE RPM/%	GAS GEN RPM/%	POWER TURBINE
Contingency Rated Power (CRP) (2 1/2 min. OEI)	1,940	20,900/100	44,700/102	903° C
Maximum Rating (10 Min. dual)	1,890	20,900/100	44,700/102	878° C
Intermediate Rated Power (IRP) (30 min dual)	1,800	20,900/100	44,700/102	851° C
Maximum Continuous Power (MCP)	1,662	20,900/100	44,700/102	810° C

ENGINE LIMITS: (T700-GE-701D/CC)

	SHAFT HP	POWER TURBINE RPM/%	GAS GEN RPM/%	POWER TURBINE
Contingency Rated Power (CRP) (2 1/2 min. OEI)	1,940	20,900/100	44,700/102	903° C
Maximum Rating (10 Min. dual)	1,890	20,900/100	44,700/102	878° C
Intermediate Rated Power (IRP) (30 min dual)	1,800	20,900/100	44,700/102	851° C
Maximum Continuous Power (MCP)	1,662	20,900/100	44,700/102	810° C

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TRANSMISSION LIMITS:
(UH-60A)

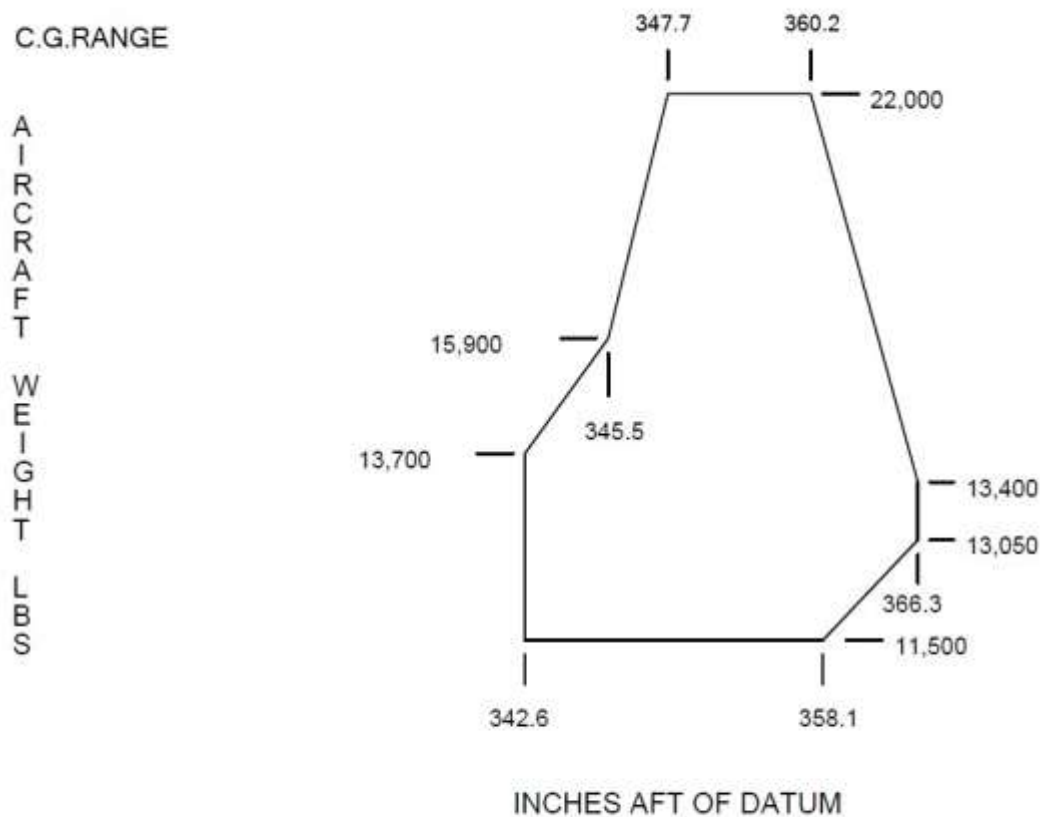
TORQUE:
110% Single Engine (No time
limit) 100% Dual Engine (No
time limit)

ROTOR LIMITS:

Max. 258
RPM Min.
232 RPM

AIRSPEED LIMITS:

V_{ne} Power on: 193 knots IAS, (221 MPH). See document DE-TM 1-1520-237-10, Operator's Manual for the Restricted Category Aircraft Model DE H60 Helicopter for variations of V_{ne} with gross weight, pressure altitude, and temperature.
Refer to document no. DE-TM 1-1520-237-10, Operator's Manual for the Restricted Category Aircraft Model DE UH-60A Helicopter (Sikorsky UH-60A BLACKHAWK Helicopter), Rev. IR, dated June 20, 2016, or later FAA approved revisions for additional limitation data.



DATUM:

341.2 inches forward of the main rotor centroid.

MAXIMUM WEIGHT:

22,000 lbs.

EMPTY WEIGHT C.G. RANGE:

None

LEVELING MEANS:

Plumb bob in L/H cabin door frame to leveling plate on cabin floor or electronic leveling means in accordance with Work Package 1727 contained in DE-TM 1-1520-237-23.

MINIMUM CREW: 2 (pilot, copilot)

NUMBER OF PASSENGERS: None. *See NOTE 14 for information on personnel carrying restrictions.

NUMBER OF SEATS: 2 at Sta. 227.1; 1 at Sta. 262.0; 3 at Sta. 282.0; 3 at Sta. 320.7; 4 at Sta. 339.8; 4 at Sta. 387.2.

FUEL CAPACITY: 361.5 gallons; 2 tanks (LH & RH interchangeable).
359.7 gallons; 2 tanks (LH & RH interchangeable) (with fuel boost pumps installed).

OIL CAPACITY: 7 quarts each engine.

OTHER LIMITS: Refer to approved document no. DE-TM 1-1520-237-10, Operator's Manual for the Restricted Category Aircraft Model DE UH-60A Helicopter (Sikorsky UH-60A BLACKHAWK Helicopter), Rev. IR, dated June 20, 2016, or later FAA approved revisions. Flight hours are counted from takeoff to landing.

SERIAL NO. APPROVED: U.S. military surplus Sikorsky UH-60A Blackhawk helicopters as identified in DE Enterprises Serial Number Approved Report Number DE-1101, Rev. IR dated June 1, 2016, or later FAA approved revision.

CERTIFICATION BASIS: Title 14 CFR Part 21 § 21.25(a)(2) effective February 1, 1965, including Amendments 21-1 through 21-42 for the special purposes listed in FAR 21.25 (b)(1)(2)(7).
§ 21.25(b)(1) Agriculture Operations
§ 21.25(b)(2) Forest & Wildlife Conservation
§ 21.25(b)(7) External Loads

Any alteration to the aircraft for Special Purposes not identified above require further FAA approval and in addition, may require noise and/or flight testing.

General Note: Any subsequent modifications to the helicopters type certified under this Type Certificate are to have the certification basis for that modification established under 14 CFR part 21 § 21.101 published June 7, 2000 which became effective June 10, 2003. Otherwise non-significant modifications are to meet the requirements of 14 CFR 29 airworthiness standards, transport category, Amendment 1 through Amendment 17, effective December 1, 1978, and 14 CFR part 29 § 29.1529, Instructions for Continued Airworthiness, Amendment 20, effective September 11, 1980.

DATE OF APPLICATION: February 29, 2016

PRODUCTION BASIS: None. No helicopters may be produced under this approval. Each helicopter must pass a conformity inspection in accordance with this TCDS, plus any additional special instructions attached to the Request for conformity, FAA 8120-10. In addition, a check by the Type Certificate holder or its agent, of the flight characteristics in accordance with applicable portions of DE-TM 1-1520-237-MTF: Maintenance Test Flight Manual for UH-60A Helicopter, IR, dated April 10, 2016, or later approved revision for model DE UH-60A helicopters.

EQUIPMENT: The basic required equipment necessary for the particular special purpose operation must be installed for certification.

II. MODEL EH-60A – (Restricted Category Rotorcraft) Approved October 1, 2019.

ENGINES: (2) General Electric T700-GE-700 Original
(2) General Electric T700-GE-701C Alternate
(2) General Electric T700-GE-701D/CC Alternate

FUEL: Aviation Kerosene JP-4, JP-5, JP-8, Jet A, Jet A-1 or Jet B.

ENGINE LIMITS: (T700-GE-700)

	SHAFT HP	POWER TURBINE RPM	GAS GEN RPM	POWER TURBINE INLET (TGT)
Military Power (30 min.)	1,561	20,900	44,700	850° C
Normal Cont. Cruise	1,318	20,900	44,700	775° C

ENGINE LIMITS: (T700-GE-701C)

	SHAFT HP	POWER TURBINE RPM/%	GAS GEN RPM/%	POWER TURBINE
Contingency Rated Power (CRP) (2 1/2 min. OEI)	1,940	20,900/100	44,700/102	903° C
Maximum Rating (10 Min. dual)	1,890	20,900/100	44,700/102	878° C
Intermediate Rated Power (IRP) (30 min dual)	1,800	20,900/100	44,700/102	851° C
Maximum Continuous Power (MCP)	1,662	20,900/100	44,700/102	810° C

ENGINE LIMITS: (T700-GE-701D/CC)

	SHAFT HP	POWER TURBINE RPM/%	GAS GEN RPM/%	POWER TURBINE
Contingency Rated Power (CRP) (2 1/2 min. OEI)	1,940	20,900/100	44,700/102	903° C
Maximum Rating (10 Min. dual)	1,890	20,900/100	44,700/102	878° C
Intermediate Rated Power (IRP) (30 min dual)	1,800	20,900/100	44,700/102	851° C
Maximum Continuous Power (MCP)	1,662	20,900/100	44,700/102	810° C

TRANSMISSION LIMITS:
(EH-60A)

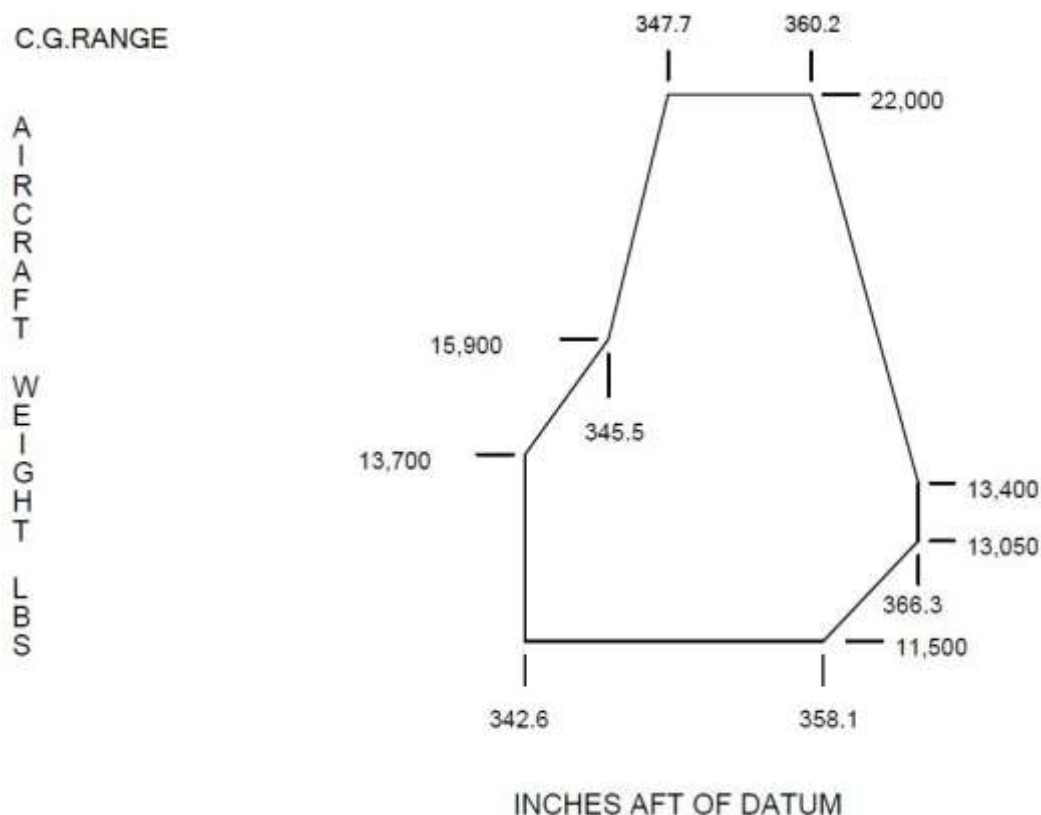
TORQUE:
110% Single Engine (No time limit)
100% Dual Engine (No time limit)

ROTOR LIMITS:

Max. 258
RPM Min.
232 RPM

AIRSPEED LIMITS:

V_{ne} Power on: 193 knots IAS, (221 MPH). See document DE-TM 1-1520-237-10, Operator's Manual for the Restricted Category Aircraft Model DE H-60 Helicopter for variations of V_{ne} with gross weight, pressure altitude, and temperature.
Refer to document no. DE-TM 1-1520-237-10, Operator's Manual for the Restricted Category Aircraft Model DE UH-60A Helicopter (Sikorsky UH-60A UH-60L EH-60A BLACKHAWK Helicopter), Rev. IR, dated June 20, 2016, or later FAA approved revisions for additional limitation data.



DATUM:	341.2 inches forward of the main rotor centroid.
MAXIMUM WEIGHT:	22,000 lbs.
EMPTY WEIGHT C.G. RANGE:	None
LEVELING MEANS:	Plumb bob in L/H cabin door frame to leveling plate on cabin floor or electronic leveling means in accordance with Work Package 1727 contained in DE-TM 1-1520-237-23.
MINIMUM CREW:	2 (pilot, copilot)
NUMBER. OF PASSENGERS	None. *See NOTE 14 for information on personnel carrying restrictions.
NUMBER OF SEATS:	2 at Sta. 227.1; 1 at Sta. 262.0; 3 at Sta. 282.0; 3 at Sta. 320.7; 4 at Sta. 339.8; 4 at Sta. 387.2.
FUEL CAPACITY:	361.5 gallons; 2 tanks (LH & RH interchangeable). 359.7 gallons; 2 tanks (LH & RH interchangeable) (with fuel boost pumps installed).
OIL CAPACITY:	7 quarts each engine.
OTHER LIMITS:	Refer to approved document no. DE-TM 1-1520-237-10, Operator's Manual for the Restricted Category Aircraft Model DE UH-60A Helicopter (Sikorsky UH-60A UH-60L EH-60A BLACKHAWK Helicopter), Rev. IR, dated June 20, 2016, or later FAA approved revisions. Flight hours are counted from takeoff to landing.
SERIAL NO. APPROVED:	U.S. military surplus Sikorsky EH-60A Blackhawk helicopters as identified in DE Enterprises Serial Number Approved Report Number DE-1101, Rev. 5 dated August 5, 2019, or later FAA approved revision.

CERTIFICATION BASIS:	<p>Title 14 CFR Part 21 § 21.25(a)(2) effective February 1, 1965, including Amendments 21-1 through 21-42 for the special purposes listed in FAR 21.25 (b)(1)(2)(7). § 21.25(b)(1) Agriculture Operations § 21.25(b)(2) Forest & Wildlife Conservation § 21.25(b)(7) External Loads</p> <p>Any alteration to the aircraft for Special Purposes not identified above require further FAA approval and in addition, may require noise and/or flight testing.</p> <p>General Note: Any subsequent modifications to the helicopters type certified under this Type Certificate are to have the certification basis for that modification established under 14 CFR part 21 § 21.101 published June 7, 2000 which became effective June 10, 2003. Otherwise non-significant modifications are to meet the requirements of 14 CFR 29 airworthiness standards, transport category, Amendment 1 through Amendment 17, effective December 1, 1978, and 14 CFR part 29 § 29.1529, Instructions for Continued Airworthiness, Amendment 20, effective September 11, 1980.</p>
DATE OF APPLICATION:	April 2, 2019
PRODUCTION BASIS:	<p>None. No helicopters may be produced under this approval. Each helicopter must pass a conformity inspection in accordance with this TCDS, plus any additional special instructions attached to the Request for conformity, FAA 8120-10. In addition, a check by the Type Certificate holder or its agent, of the flight characteristics in accordance with applicable portions of DE-TM 1-1520-237-MTF: Maintenance Test Flight Manual for UH-60A EH-60A Helicopter, IR, dated April 10, 2016, or later approved revision for model DE EH-60A helicopters.</p>

NOTES

NOTE 1:	<p>A current weight and balance report including a list of equipment included in the certified empty weight, and loading instructions when necessary, must be provided for each helicopter at the time of original airworthiness certification.</p>
NOTE 2:	<p>The following placards must be prominently displayed in the cockpit in full view of the pilots:</p> <p>Placard No. 1</p> <p>THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER OPERATIONS MANUAL.</p> <p>Placard No. 2</p> <p>THIS ROTORCRAFT MUST BE OPERATED IN ACCORDANCE WITH THE RESTRICTED CATEGORY OPERATING LIMITATIONS OF 14 CFR PART 91.313.</p> <p>Placard No. 3</p> <p>EXTERNAL LOADS OPERATIONS: V_{ne} WILL BE DETERMINED FOR EACH PROPOSED EXTERNAL LOAD APPLICATION.</p>
NOTE 3:	<p>The builder's data plate required by part 45 § 45.13 must be installed in accordance with Delta Enterprise Drawing DE-DWG-1201, Rev. IR, dated April 20, 2016, or later FAA approved revisions.</p>
NOTE 4:	<p>The helicopter(s) must be serviced, maintained, inspected, repaired and overhauled in accordance with the requirements specified in Delta Enterprise document no. DE-1103 "Instructions for Continued Airworthiness" Rev. C dated August 1, 2016, or later FAA accepted revision, or inspected in accordance with other FAA accepted inspection programs. The service life limited parts overhaul and retirement intervals for these helicopters is specified in Delta Enterprise no. DE-1103 "Instructions for</p>

Continued Airworthiness” Rev. C, dated August 1, 2016, or later FAA approved revisions. A FAA approved/accepted copy must accompany each helicopter on delivery.

- NOTE 5: This helicopter must be operated in accordance with the Operator Manual comprised of the following:
- (1) DE-TM 1-1520-237-10, Operator’s Manual for the Restricted Category Aircraft Model DE UH-60A Helicopter (Sikorsky UH-60A BLACKHAWK Helicopter), Rev. IR, Dated June 20, 2016, or later FAA approved revisions.
- NOTE 6: Prior to obtaining an original Airworthiness Certificate:
- A. Each helicopter must pass a conformity inspection in accordance with Delta Enterprise document no. DE 1104 “Engineering Configuration”, Rev. IR dated June 8, 2016, or later FAA approved revision. The Engineering Configuration Report identifies the U.S. Army airframe changes, and special purpose modifications accomplished on that particular helicopter.
- B. Each helicopter must pass an inspection for any possible hidden damage and the Military records reviewed for acceptability of any repairs or alterations.
- C. The maintenance, overhaul, and modification records of each helicopter must be reviewed for military changes that may affect the airworthiness of the helicopter. Modifications and changes of equipment that affect the safety or performance of the helicopter must be approved by the Federal Aviation administration.
- D. After the required inspections, the aircraft must be found to be in a good state of preservation, repair, and in a condition for safe operation.
- NOTE 7: A Restricted Category helicopter may not be operated in a foreign country without the express written approval of that country.
- NOTE 8: This helicopter has not been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation.
- NOTE 9: Military to Civil or Military to Military engine changes are allowed provided the replacement engine is conformed to Delta Enterprise document no. DE-1103 “Instructions for Continued Airworthiness” Rev. C dated August 1, 2016, or later approved FAA revision. The military or civil replacement engine must have proper military or civil records and have the applicable FAA Airworthiness Inspection accomplished and is in an airworthy condition.
- NOTE 10: The Safety of Flight Compliance Report for the helicopter contained in Delta Enterprise document no. DE-1106 “Airworthiness & Military Safety Messages”, Rev. IR, dated May 20, 2016, or later FAA Approved revisions, must be complied with prior to original airworthiness certification.
- NOTE 11: Alternative and emergency fuels are listed in Delta Enterprise document no. DE-TM 1-1520-237-10, Operator’s Manual for the Restricted Category Aircraft Model DE UH-60A Helicopter (Sikorsky UH-60A BLACKHAWK Helicopter), Rev. IR, Dated April 20, 2016, or later FAA approved revisions.
- NOTE 12: Any alteration to the type design of this aircraft may require Instructions for Continued Airworthiness. These instructions must be submitted and accepted by the Administrator, prior to approval for return to service.
- NOTE 13: The certification life limits for the helicopter, its engine and appliances were based on satisfactory service history as designed and operated by the military. Therefore, to operate and maintain the aircraft to the original acceptance criteria, and maintain it’s safe for intended use requirement, cycle counting and operational time tracking is required on certain critical components. Ref. Delta Enterprise document no. DE-1103 “Instructions for Continued Airworthiness” Rev. C dated August 1, 2016, or later FAA approved revisions.

NOTE 14:

No person may be carried onboard this aircraft unless that person is a flight crewmember; is a flight crewmember trainee; performs an essential function in connection with a special purpose operation for which the aircraft is certificated; or is necessary to accomplish the work activity directly associated with that special purpose. Reference 14 CFR §91.313(d).

END